



## Introduction

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*Advances in the Systematics of Platygastroidea III* builds on the foundation laid by its predecessors, presenting 17 articles authored by a diverse group of researchers. Like previous installments, these articles cover several active areas of platygastroid research including alpha and integrative taxonomy, paleontology, phylogenetics, morphology, and biological control.

Studies on Platygastidae comprise the first four papers. Awad et al. (2021) raise the bar for taxonomy in the subfamily Platygasterinae with their description of 16 new species of *Synopeas* from New Guinea in an integrative framework that includes plant associations and DNA barcoding. Talamas et al. (2021a) describe a new genus and species of Platygastidae from Burmese amber, utilizing information from both fossil and extant taxa. The subfamily Sceliotrachelinae is the subject of two articles that treat specimens from different continents. Lahey et al. (2021b) revise the Australian genus *Alfredella* and sink a genus that was erected for an apomorphic species of *Amitus*. Genus-level treatment of the sceliotracheline fauna of the Afrotropical region is presented by van Noort et al. (2021), with new species described in four genera, including revisions of Old World *Parabaeus* and the South African endemic genera *Afrisolia* and *Sceliotrachelus*.

Advances in imaging technologies have made it possible to non-invasively examine the internal anatomy of insects. Nowhere is this more valuable than in the study of fossil taxa for which specimens are often rare and dissections are not possible. Bremer et al. (2021) describe a new species of the previously monobasic *Janzenella*, the sole genus in Janzenellidae, preserved in Baltic amber. Their description utilizes synchrotron microtomography to visualize external and internal morphological characters that were otherwise inaccessible. Their analysis of internal structures dovetails with the morphological exploration of the internal mesosoma by Mikó et al. (2021b) that documents characters that have potential to help classify fossil taxa for which family-level placement is presently unclear.

The second half of this special issue comprises 11 papers on Scelionidae. Two of these are revisions of tropical genera that result in the description of 17 new species (Lahey et al. 2021a; Mikó et al. 2021a). The treatment of *Oxyscelio* by Mo et al. (2021) expands the known diversity of the Chinese fauna with a combined analysis of morphology and COI barcode data. The global importance of stink bugs and their associated parasitoids is evidenced by the remaining eight papers. These include molecular phylogenetic studies that result in the synonymy of *Latonius* under *Trissolcus* (Vasilić et al. 2021); the resurrection of *Hadronotus* for a portion of *Gryon* (Talamas et al. 2021b); the discovery of adventive parasitoids on two continents (Birkmire et al. 2021; Hogg et al. 2021; Rojas-Gálvez et al. 2021); interbreeding studies between populations of a new *Gryon* species (Hogg et al. 2021); a new, medically-important host association for *Telenomus fariai* (Ramírez-Ahuja et al. 2021); the description of a new species of *Trissolcus* from Iran (Ranjbar et al. 2021); and an analysis of chemoreceptor genes from *Trissolcus basalis* (King et al. 2021).

The increased number of papers in this special issue reflects the growing number of workers in Platygastroidea, which have historically been few in number. Importantly, it also reflects cooperation on a global level, with contributing authors from all inhabited continents.

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